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10/766,462	01/28/2004	Masahiko Nagai	JP920020225US1	3166
56687 7590 05/27/2008 Driggs, Hogg, Daugherty & Del Zoppo Co., L.P.A. 38500 CHARDON ROAD DEPT. LEN WILLOUGHBY HILLS, OH 44094			EXAMINER	
			SITTA, GRANT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/766,462	NAGAI, MASAHIKO	
Office Action Summary	Examiner	Art Unit	
	GRANT D. SITTA	2629	
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPOWHICHEVER IS LONGER, FROM THE MAILING IF Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perior. Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO 1.136(a). In no event, however, may a reply be tid d will apply and will expire SIX (6) MONTHS fron the, cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on 14. 2a) This action is FINAL . 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr		
Disposition of Claims			
4) Claim(s) 1-20 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdr 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/	rawn from consideration.		
9)☑ The specification is objected to by the Examir 10)☑ The drawing(s) filed on 28 January 2004 is/ar Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre 11)☐ The oath or declaration is objected to by the E	re: a) accepted or b) objected or b objected or b)	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bure. * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat iority documents have been receiv au (PCT Rule 17.2(a)).	tion No red in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	oate	

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DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required: "computer readable medium" needs to be clearly defined in

the specification.

Claim Rejections - 35 USC § 112

2. Claim 10 recites the limitation "the physical proximity" in claim 10 line 5. There is

insufficient antecedent basis for this limitation in the claim.

3. Claim 11 recites the limitation "the output" in claim 11 line 2. There is insufficient

antecedent basis for this limitation in the claim.

4. Claim 11 recites the limitation "the detected reception" in claim 11 line 5. There

is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 2. Claims 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bilotti et al (6,622,012) hereinafter, Bilotti.
- 3. In regards to claim 14, Billotti teaches a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of one of claim 10. (col. 4, lines 10-37). Examiner points particularly to the step of claim 10 wherein detecting the physical proximity of two members (col. 4, lines 1-37) coupled for movement one relative to the other and determining the appropriateness detecting reception of a signal interaction normally indicative of initiation of a system operation (fig. 1 (18, 20 and 22) and (col. 4, lines 10-37).
- 4. In regards to claim 15, Billotti teaches a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of one of claim 11 (col. 4, lines 10-37). Examiner points to particularly the step of detecting the physical proximity (col. 4, lines 10-15) of the members and determining the appropriateness of initiating the system operation from close proximity of the members (col. 4, lines 1-37).

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti et al (6,622,012) hereinafter Bilotti, in view of Masashi (JP 10-197614) hereinafter, Masahi.
- 4. In regards to claim 1, Bilotti discloses the limitations of first and second members (fig. 1 top and bottom of laptop) movable (fig. 1 (16)) one relative to the other; an element mounted (fig. 1(18)) in one of said members which initiates an action in the apparatus (col. 3, lines 30-45); a detector (fig. 1 (20)) mounted in the other of said members which responds to the proximity (col. 3, lines 38-52) of and detects the intensity of interaction with said element, (col. 3, lines 18-67) said element and said

detector; said inhibitor (Masahi), said element, and said detector cooperating in determining the physical proximity (col. 4, lines 10-37) of said members one relative to the other and enabling an effective intensity of interaction between (col. 4, lines 1-37) said element and said detector when said members are in close proximity one to the other (col. 4, lines 1-37).

Bilotti differs from the claimed invention in that Bilotti does not disclose an inhibitor mounted in said one of said members which selectively inhibits the intensity of interaction between said element and said detector;

However, Masahi teaches a system and method for an inhibitor mounted in said one of said members which selectively inhibits the intensity ([0014-0017] inhibitor circuit is the digital disposal circuit 3 and the constant current circuit) of interaction between said element and said detector. ([0014--0022] ,particularly:

"A digital disposal circuit 3 processes and outputs the voltage signal Vs supplied from a sensing coil 12. In the magnetic detector of the above-mentioned configuration, if pulse current Id (refer to drawing 2 (a)) is supplied to an exiting coil 11 from the drive circuit 2 and an exiting coil 11 is excited, induction of the electrical potential difference Vs of peak value Vsp will be carried out to a sensing coil 12 to the start Tr of the supplied pulse current Id, or the timing of falling Tf (refer to drawing 2 (b)). A digital disposal circuit 3 processes and outputs the voltage signal Vs supplied from a sensing coil 12. [0015]

A constant current source 30 performs negative feedback actuation to the electrical potential difference Vs supplied to a digital disposal circuit 3 from a sensing coil 12 based on the signal given from a digital disposal circuit 3 while it supplies a bias current to a sensing coil 12 and produces a circuit output Vout. According to this configuration, fluctuation of the circuit output Vout resulting from fluctuation of the property of a magnetometric sensor 1 can be suppressed, and precision can be raised."

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of the inhibitor as taught by Masahi in order to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007] of Masahi).

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5. In regards to claim 8, Bilotti teaches a portable computer system body having a keyboard therein;

a portable computer system (col. 3, lines 18-30) lid having a display therein (fig. 1 (14));

a coupling joining (fig. 1 (16)) said body and said lid together for movement thereof one relative to the other between open and closed positions (col. ,3, lines 18-67); and

a proximity detection subsystem which determines (fig. 1 (18, 20 and 22)) whether said body and said lid are in the closed position (col. 4, lines 1-37), said subsystem comprising:

an element mounted in one of said body (fig. 1 (20)) and said lid (fig. 1 (14)) which initiates an action in the apparatus (col. 4, lines 1-28);

a detector mounted in the other of said body (fig. 1 (18)) and said lid which responds to the proximity of and detects the intensity of interaction with said element (col. 4, lines 1-37, "Hall effect device").

Bilotti differs from the claimed invention in that Bilotti does not disclose an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector; said inhibitor, said element and said detector cooperating in determining the physical proximity of said body and said lid one relative to the other and enabling an effective intensity of

interaction between said element and said detector when said body and said lid are in the closed position one to the other.

However, Masahi teaches a system and method for an inhibitor [[0014-0017] mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector; said inhibitor, said element and said detector cooperating in determining the physical proximity of said body and said lid one relative [0019] to the other and enabling an effective intensity of interaction between said element and said detector when said body and said lid are in the closed position one to the other [0021-0025].

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of the inhibitor as taught by Masahi in order to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007] of Masahi).

6. In regards to claim 10, Billotti teaches detecting reception of a signal interaction normally indicative of if imitation of a system operation (col. 4, lines 1-37); detecting the physical proximity of two members (col. 4, lines 1-37) coupled for movement one relative to the other and determining the appropriateness detecting reception of a signal interaction normally indicative of initiation of a system operation (fig. 1 (18, 20 and 22);

Billotti fails to teach selectively inhibiting response to the detected reception; and of initiating the system operation from close proximity of the members.

However, Masahi teaches selectively inhibiting response to the detected reception; and of initiating the system operation from close proximity of the members [0013-0018].

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of the inhibitor as taught by Masahi in order to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007] of Masahi).

7. In regards to claim 11, Billotti teaches monitoring the output of a detector mounted (fig. 18, 20 and 22) in one of two members (fig. 1 (14 and 12)) coupled for movement one relative to the other (fig. 1 (16)); detecting an output normally indicative of initiation of a system operation (col. 4, lines 1-37); and detecting the physical proximity (col. 4, lines 10-15) of the members and determining the appropriateness of initiating the system operation from close proximity of the members (col. 4, lines 1-37).

Billotti fails to teach selectively inhibiting response to the detected reception.

However, Masahi teaches selectively inhibiting response to the detected reception [0004 and 0013-0018].

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of the inhibitor as taught by Masahi in order to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007] of Masahi).

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8. In regards to claim 2, Billotti teaches wherein said element is free of any necessity of application of an external source of power (fig. 1 (18)) col. 3, lines 40 "magnet").

- 9. In regards to claim 3, Billotti teaches wherein said detector responds to one of an electromagnetic wave, an electric field, a magnetic field, corpuscular radiation, and an acoustic wave (fig. 1 (20) col. 3-4, lines 63-9).
- 10. In regards to claim 4, Billotti as modified by Masahi teaches wherein said element is a magnet (fig. 1 (18) and col. 3, line 40 Billotti), said detector is a Hall effect switch (col. 4, lines 23-37 Billotti) responsive to imposition of a magnetic field (col. 4, lines 23-37 Billotti), and said inhibitor is a coil generating a magnetic field opposing the field of said magnet ([0009] Masahi).
- 11. In regards to claim 5, Billotti and Masahi discloses the limitations of claim 1.

 Billotti as modified by Masahi does not disclose wherein said element is a light source, said detector is a photoelectric device, and said inhibitor is a light shield.

However, routine experimentation, optimum ranges and use of preferred materials are generally considered obvious to one of ordinarily skill in the art *In re Aller*, 105 USPQ 233 (CCPA 1955).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Billotti and Masahi to include the use of wherein said element is a light source, said detector is a photoelectric device, and said inhibitor (Masahi) is a light shield as taught by *In re Aller* in order to provide use of preferred materials since optical material are not susceptible to malfunction magnetic clips and other problems as stated in Applicant's disclosure.

- 12. In regards to claim 6, Billotti teaches wherein one of said members is the lid of a portable computer system having a display therein and the other of said members is the body of a portable computer system having a keyboard therein (col. 3, lines 29-30).
- 13. In regards to claim 7,Billotto as modified by Masahi teaches wherein said inhibitor is responsive to a coded driving signal ([0011] of Masahi Examiner notes applying periodicity currents as stated by Masahi such as alternating currents or pulse currents are coded driving signals because they contain start/falling information.) and further wherein said inhibitor, said element and said detector cooperate in determining the physical proximity of said members one relative to the other by detection of the coded driving signal (fig. 1 (18, 20 and 22 of Billotto) col. 2, lines 33-53).

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14. In regards to claim 9, Billotti as modified by Masahi teaches wherein said element is a magnet (fig. 1 (18) and col. 3, line 40), said detector is a Hall effect switch (col. 4, lines 23-37) responsive to imposition of a magnetic field (col. 4, lines 23-37), and said inhibitor is a coil generating a magnetic field opposing the field of said magnet ([0009] of Masashi) further comprising a microprocessor (fig. 1 (22) of Billotti) operatively connected to control excitation of said coil ([0011 "digital disposal circuit" of Masashi).

- 15. In regards to claim 12, Billotti as modified by Masahi teaches wherein the selective inhibition (Masahi teaches the inhibition) of response occurs in response to detection that the members are withdrawn one from the other (col. 4, lines 10-37 of Billotti).
- 16. In regards to claim 13, Billotti as modified by Masashi teaches wherein selective inhibition (Masahi teaches the inhibition) of response is discontinued in response to detection that the members are in close proximity one to the other (col. 4, lines 10-37).
- 17. In regards to claim 19, Billotti further including preventing detection of the output (inherent since computers include power switches).

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18. In regards to claim 20, Billotti as modified by Masahi teaches wherein the inhibitor is activated by a power supply external to the inhibitor (fig. 1 (4) [0013] of Masahi). Examiner notes the power supply is external to 3 and 30.

- 19. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Masashi, in view of Bartingale et. al (US 2003/0048102) hereinafter, Bartingale.
- 20. In regards to claim 16, Bilotti as modified by Masashi disclose the limitations of claim 1 wherein the element is a magnet (fig. 1 (18) of Bilotti).

Bilotti and Masashi differ from the claimed invention in that Bilotti and Masashi do not disclose further including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other.

However, Bartingale teaches including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other ([0040 and 0043] of Bartingale).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Masashi to include the use of method further including a noise magnetic field filter that filters external magnetic noise, thereby mitigating

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interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other as taught by Bartingale in order to remove an noise that may cause interference as stated in ([0400] of Bartingale).

21. In regards to claim 18, Bilotti as modified by Masashi disclose the limitations of claim 10.

Bilotti and Masashi differ from the claimed invention in that Bilotti and Masashi do not disclose further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected.

However, Bartingale teaches further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected ([0040 and 0043] of Bartingale).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Masashi to include the use of method further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected as taught by Bartingale in order to remove a noise that may cause interference as stated in ([0400] of Bartingale).

22. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Masashi, in view of Sunter et. al (US 5,323,011) hereinafter, Sunter.

23. In regards to claim 17, Bilotti as modified by Masashi disclose the limitations of claim 8.

Bilotti and Masashi differ from the claimed invention in that Bilotti and Masashi do not disclose wherein the detector responds to corpuscular radiation.

However, Suntar teaches a system and method for wherein the detector responds to corpuscular radiation (col. 1, lines 35-46 of Suntar).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Masashi to include the use of method for wherein the detector responds to corpuscular radiation as taught by Suntar in order to provide another detection means as stated in (col. 1, lines 35-46 of Suntar).

Response to Arguments

- 24. Applicant's arguments filed 2/14/2008 have been fully considered but they are not persuasive.
- 25. In response to applicant's argument (Remarks top of page 10) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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In this case, Bilotti teaches relates to magnetic pole insensitive switch circuit for a device with a movable cover or door, including notebooks and laptop computers (col. 3, lines 28-30). The movable end of the cover includes a magnet. The base includes a switch that includes a sensor for sensing the magnetic field of the magnet and a threshold detection circuit (col. 3, lines 45-52). A transducer provides a first output signal which varies depending upon the orientation the magnet to the sensor and a first polarity and an opposite signal voltage that is proportional to a magnetic field having a second different polarity (col. 3, lines 52-60). Also, a comparator coupled to the transducer to receive the first and second signal (col. 3-4, lines 62-9). Thus, the signal provided by the switch indicates whether the cover is opened or closed (col. 4, lines 10-15).

Masashi teaches a magnetic detection circuit comprises a magnetic sensor 1, a drive circuit 2, a signal processing circuit 3 and a constant current source 30. The magnetic sensor 1 comprises an exciting coil 11 and a detection coil 12. The exciting coil 11 and the detection coil 12 are coupled electromagnetically each other through a magnetic body 13 constituting a magnetic circuit. The drive circuit 2 supplies a periodic current to the exciting coil 11 thus exciting the coil 11. The signal processing circuit 3 processes a signal VS supplied from the detection coil 12 and outputs the processed signal. The constant current source 30 performs negative feedback operation for a signal being supplied from the detection coil 12 to the signal processing circuit 3 based on a signal outputted from the signal processing circuit 3 (abstract).

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It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of the inhibitor as taught by Masahi in order to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007] of Masahi).

- 26. In response to applicant's argument that the proposed modifications would change the basic principles and would render Bilotti unsatisfactory for its intended purpose (Remarks 2nd and 3rd paragraph of page 10), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

 See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Therefore, Examiner asserts it would have been obvious to include the *concept* of the inhibitor of Masahi in the two moving members of Bilotti. As discussed, the test for obviousness is not whether the features of a secondary reference (Masahi) may be bodily incorporated into the structure of the primary reference (Bilotti). Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.
- 27. In response to applicant's argument in regards to claims 4 on pages 11-12 of Remarks (dated 2/14/2008). Examiner points to [0009] of Masahi. In [0009] Masahi

teaches means, to solve the problem, to perform auto cancellation for the magnetic detector means in regards to external magnetic fields as stated in ([0005-0007]).

28. In response to applicant's argument in regards to claims 7 on pages 12 of Remarks (dated 2/14/2008). Examiner points to [0011] of Masahi. In [0011] Masahi teaches means of applying periodicity currents, such as alternating current or pulse current are supplied to an exiting coil from a drive circuit and an exiting coil is excited. The digital disposal circuit processes and outputs the signal supplied from the sensing coil. Examiner contends that the inhibitor of Masahi (the constant current source and the digital disposal circuit) is responsive to a coded signal ("periodicity currents") and further wherein said inhibitor, said detector cooperate in determining the physical proximity of said members one relative to the other by detection of the coded driving signal ((fig. 1 (18, 20 and 22 of Billotto) col. 2, lines 33-53).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT D. SITTA whose telephone number is (571)270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Sumati Lefkowitz/ Supervisory Patent Examiner, Art Unit 2629

/GDS/ May 20, 2008